

Notice of Allowability

Application No.

10/068,852

Examiner

Carlos Lopez

Applicant(s)

KASUU ET AL.

Art Unit

1731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 9/28/04 and 10/12/04.
2. ☒ The allowed claim(s) is/are 1-3.
3. ☒ The drawings filed on 11 February 2002 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 2/13/04
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 10/12/04.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

Election/ Restriction

Applicant's election of claims 1-3 in the reply filed on 9/28/04 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

EXAMINER'S AMENDMENT

Authorization for this examiner's amendment was given in a telephone interview with Arthur Steiner on 10/12/04.

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

Claim 1 has been rewritten to read as follows:

1(Currently Amended). A fusion splicing method for splicing optical fibers, comprising:

a fusion splicing process in which fusion splicing is performed by a butting end faces of two optical fibers together; and

a heat treatment process in which the fusion spliced part of the optical fibers and the vicinity thereof are heated, wherein

heating in the heat treatment process is performed using an arc heating unit having a pair of opposing arc electrodes, the fusion spliced optical fibers

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being placed therebetween;

the heating center position of the arc electrodes being shifted by a relative movement with respect to the optical fibers in a direction other than the Y-axis direction $[[()]]$, a direction perpendicular to both Z-axis direction and the opposing direction of arc electrodes $[[()]]$, and Z-axis direction $[[()]]$, the axial direction of the optical fibers $[[()]]$, via the fusion spliced part in the Y-Z plane which is formed by the Z-axis direction and Y-axis direction.

Claim 2 has been rewritten to read as follows:

2(Currently Amended). A fusion splicing method for optical fibers according to claim 1, wherein:

the heat treatment process is performed in a manner such that the heating center position is shifted in a direction having an inclination of 20° to $[[45^{\circ}]]$ 45° relative to the Z-axis direction; and

the heating center position is subjected to a relative movement with respect to the optical fibers when the heating center position is located at a point which is neither the fusion-spliced part nor a point that is 2 mm or more distanced from the axis of the optical fibers.

This application is in condition for allowance except for the presence of claim 4 to an invention non-elected without traverse. Accordingly, claim 4 been cancelled.

The title has been rewritten to read as follows:

Method for fusion splicing of optical fibers ~~and optical fiber transmission line~~

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance: the cited prior art fails to disclose or reasonably suggest providing a fusing splicing process for optical fibers and a heat treatment process performed by an arc heating unit having a pair of opposing arc electrodes wherein the heating center position of the arc electrodes being shifted by a relative movement with respect to the optical fibers in two directions, y-axis and z-axis as defined in claim 1. The cited prior art (JP 2000-098171 and JP 64-066071) discloses the movement of the arc electrodes in only one direction, z-axis, but does not disclose or reasonably a two axis, direction, relative movement of the arc electrodes as claimed.


Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlos Lopez whose telephone number is 571.272.1193. The examiner can normally be reached on Mon.-Fri. 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571.272.1189. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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A handwritten signature in black ink, appearing to read "Peter Chin", with a stylized flourish at the end.

PETER CHIN
PRIMARY EXAMINER